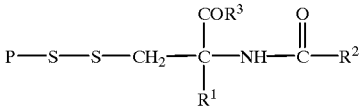
the following procedure. The oligonucleotide is mixed with a two-fold molar excess of cystamine in the presence of a water-soluble carbodiimide reagent, EDC. The mixture is maintained at 25° C. for 2 hours and the a two-fold molar excess to cystamine of DTT is added to reduce disulfide bonds. After separating the oligonucleotide from free cystamine and DTT using a Sepahdex G-25 column, a small amount of the thiolated oligonucleotide is reacted with Ellman's reagent and the concentration of sulfhydryl groups determined using the absorbance at 412 nm (assuming an ϵ of 1.36×10^4 M^{-1}). Subsequently, the number of sulfhydryl groups per oligonucleotide molecule is determined. The thiolated oligonucleotide is mixed in bicarbonate buffer, pH 8, with Pal-PDC in two-fold molar excess to the number of sulfhydryl groups in the oligonucleotide. The palmitylated oligonucleotide is purified using a Sephadex G-25 column.

From the foregoing description, one skilled in the art can readily ascertain the essential characteristics of the invention and, without departing from the spirit and scope thereof, can adapt the invention to various usages and conditions. Changes in form and substitution of equivalents are contemplated as circumstances may suggest or render expedient, and any specific terms employed herein are intended in a descriptive sense and not for purposes of limitation.

What is claimed is:

1. A compound of the formula VI



in which P is a therapeutically active protein; R^1 is hydrogen, lower alkyl or aryl; R^2 is selected from the group consisting of a lipid, $CH_2CH_2CH(NH_2)CO$-lipid, $—CH_2CH_2CH(NHCO\text{-}lipid)CO_2H$, or $—CH_2CH_2CH(NHCO\text{-}lipid)CO\text{-}lipid$, wherein said lipid is a hydrophobic substituent consisting of 4 to 26 carbon atoms and said lipid together with the attached carbonyl is a fatty acid acyl group; and R^3 is —OH.

2. The compound according to claim **1**, wherein R^1 is hydrogen and R^2 is a lipid.

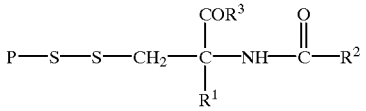
3. The compound according to claim **1**, wherein R^1 is hydrogen and R^2 is $—CH_2CH_2CH(NH_2)CO$-lipid, $—CH_2CH_2CH(NHCO\text{-}lipid)CO_2H$, or $—CH_2CH_2CH(NHCO\text{-}lipid)CO\text{-}lipid$.

4. The compound of claim **1**, wherein said lipid is a hydrophobic substitutent consisting of 5 to 19 carbon atoms.

5. The compound of claim **1**, wherein R^2 together with the attached carbonyl is palmityl, oleyl or stearyl.

6. The compound of claim **1**, wherein R^2 together with the attached carbonyl is cholyl or deoxycholyl.

7. A compound of the formula VI



in which P is a therapeutically active protein; R^1 is hydrogen, lower alkyl or aryl; R^2 is selected from the group consisting of a lipid, $—CH_2CH_2CH(NH_2)CO$-lipid, $—CH_2CH_2CH(NHCO\text{-}lipid)CO_2H$, or $—CH_2CH_2CH(NHCO\text{-}lipid)CO\text{-}lipid$; and R^3 is (a) a lipid, $—CH_2CH_2CH(NH_2)CO$-lipid, $—CH_2CH_2CH(NHCO\text{-}lipid)CO_2H$, or $—CH_2CH_2CH(NHCO\text{-}lipid)CO\text{-}lipid$; or (b) an amino acid chain comprising one or 2 amino acids and terminating in $—CO_2H$ or $—COR^2$; wherein said lipid is a hydrophobic substituent consisting of 4 to 26 carbon atoms and said lipid together with the attached carbonyl is a fatty acid acyl group.

8. The compound of claim **7**, wherein R^1 is hydrogen.

9. The compound of claim **7**, wherein R^1 is hydrogen; R^2 is $—CH_2CH_2CH(NH_2CO\text{-}lipid$, $—CH_2CH_2CH(NHCO\text{-}lipid)CO_2H$, or $—CH_2CH_2CH(NHCO\text{-}lipid)CO\text{-}lipid$; and R^3 is $—NHCH_2CO_2H$ or $—NHCH_2CO\text{-}lipid$.

10. The compound of claim **7**, wherein said lipid group is a hydrophobic substituent consisting of 5 to 19 carbon atoms.

11. The compound of claim **7**, wherein R^2 is a lipid group.

12. The compound of claim **7**, wherein R^2 together with the attached carbonyl is palmityl, oleyl or stearyl.

13. The compound of claim **7**, wherein R^2 together with the attached carbonyl is cholyl or deoxycholyl.

14. The compound of claim **1**, wherein P is a protein comprising a thiol containing amino acid.

15. The compound of claim **14**, wherein said thiol containing amino acid is cysteine.

16. The compound of claim **7**, wherein P is a protein comprising a thiol containing amino acid.

17. The compound of claim **16**, wherein said thiol containing amino acid is cysteine.

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